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Pro Val Lys Lys Lys Thr Lys Pro Ile Ile Phe Val Ser Asp Arg
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Ala Asn Ser Asn Lys Glu Leu Gly Val Asp Gln Glu Ser Glu Glu Gly
        610   615   620

Lys Gly Lys Thr Ser Pro Asp Lys Gln Lys Gln Ser Pro Gln Pro Gln
625   630   635   640

Pro Gly Ser Ser Asp Gln Glu Ser Glu Glu Gln Gln Gln Phe Arg Asn
                645   650   655

Ile Phe Lys Gln Ile Ala Gly Asp Asp Met Glu Ile Cys Ala Asp Glu
            660   665   670

Leu Lys Lys Val Leu Asn Thr Val Val Asn Lys His Lys Asp Leu Lys
            675   680   685

Thr His Gly Phe Thr Leu Glu Ser Cys Arg Ser Met Ile Ala Leu Met
    690   695   700

Asp Thr Asp Gly Ser Gly Lys Leu Asn Leu Gln Glu Phe His His Leu
705   710   715   720

Trp Asn Lys Ile Lys Ala Trp Gln Lys Ile Phe Lys His Tyr Asp Thr
                725   730   735

Asp Gln Ser Gly Thr Ile Asn Ser Tyr Glu Met Arg Asn Ala Val Asn
                740   745   750

Asp Ala Gly Phe His Leu Asn Asn Gln Leu Tyr Asp Ile Ile Thr Met
            755   760   765

Arg Tyr Ala Asp Lys His Met Asn Ile Asp Phe Asp Ser Phe Ile Cys
    770   775   780

Cys Phe Val Arg Leu Glu Gly Met Phe Arg Ala Phe His Ala Phe Asp
785   790   795   800

Lys Asp Gly Asp Gly Ile Ile Lys Leu Asn Val Leu Glu Trp Leu Gln
                805   810   815

Leu Thr Met Tyr Ala
                820

<210> 7
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<212> PRT
<213> Homo sapiens

<220>

17

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Met Pro Thr Val Ile Ser Pro Thr Val Ala Pro Arg Thr Gly Ala Glu
 1               5                  10                  15

Pro Arg Ser Pro Gly Pro Val Pro His Pro Ala Gln Gly Lys Thr Thr
            20                  25                  30

Glu Ala Gly Gly Gly His Pro Gly Gly Ile Tyr Ser Ala Ile Ile Ser
            35                  40                  45

Arg Asn Phe Pro Ile Ile Gly Val Lys Glu Lys Thr Phe Glu Gln Leu
    50                  55                  60

His Lys Lys Cys Leu Glu Lys Lys Val Leu Tyr Leu Asp Pro Glu Phe
65                  70                  75                  80

Pro Pro Asp Glu Thr Ser Leu Phe Tyr Ser Gln Lys Phe Pro Ile Gln
                85                  90                  95

Phe Val Trp Lys Arg Pro Pro Glu Ile Cys Glu Asn Pro Arg Phe Ile
            100                 105                 110

Ile Gly Gly Ala Asn Arg Thr Asp Ile Cys Gln Gly Asp Leu Gly Asp
            115                 120                 125

Cys Trp Leu Leu Ala Ala Ile Ala Cys Leu Thr Leu Asn Glu Arg Leu
    130                 135                 140
```

18

```
Leu Phe Arg Val Ile Pro His Asp Gln Ser Phe Thr Glu Asn Tyr Ala
145             150             155             160

Gly Ile Phe His Phe Gln Phe Trp Arg Tyr Gly Asp Trp Val Asp Val
            165             170             175

Val Ile Asp Asp Cys Leu Pro Thr Tyr Asn Asn Gln Leu Val Phe Thr
            180             185             190

Lys Ser Asn His Arg Asn Glu Phe Trp Ser Ala Leu Leu Glu Lys Ala
        195             200             205

Tyr Ala Lys Leu His Gly Ser Tyr Glu Ala Leu Lys Gly Gly Asn Thr
210             215             220

Thr Glu Ala Met Glu Asp Phe Thr Gly Gly Val Thr Glu Phe Phe Glu
225             230             235             240

Ile Lys Asp Ala Pro Ser Asp Met Tyr Lys Ile Met Arg Lys Ala Ile
            245             250             255

Glu Arg Gly Ser Leu Met Gly Cys Ser Ile Asp Asp Gly Thr Asn Met
            260             265             270

Thr Tyr Gly Thr Ser Pro Ser Gly Leu Asn Met Gly Glu Leu Ile Ala
        275             280             285

Arg Met Val Arg Asn Met Asp Asn Ser Leu Leu Arg Asp Ser Asp Leu
        290             295             300

Asp Pro Arg Ala Ser Asp Asp Arg Pro Ser Arg Thr Ile Val Pro Val
305             310             315             320

Gln Tyr Glu Thr Arg Met Ala Cys Gly Leu Val Arg Gly His Ala Tyr
            325             330             335

Ser Val Thr Gly Leu Glu Glu Ala Leu Phe Lys Gly Glu Lys Val Lys
            340             345             350

Leu Val Arg Leu Arg Asn Pro Trp Gly Gln Val Glu Trp Asn Gly Ser
        355             360             365

Trp Ser Asp Gly Trp Lys Asp Trp Ser Phe Val Asp Lys Asp Glu Lys
370             375             380

Ala Arg Leu Gln His Gln Val Thr Glu Asp Gly Glu Phe Trp Met Ser
385             390             395             400

Tyr Asp Asp Phe Val Tyr His Phe Thr Lys Leu Glu Ile Cys Asn Leu
            405             410             415

Thr Ala Asp Ala Leu Glu Ser Asp Lys Leu Gln Thr Trp Thr Val Ser
        420             425             430

Val Asn Glu Gly Arg Trp Val Arg Gly Cys Ser Ala Gly Gly Cys Arg
        435             440             445
```

19

Asn Phe Pro Asp Thr Phe Trp Thr Asn Pro Gln Tyr Arg Leu Lys Leu
    450   455   460

Leu Glu Glu Asp Asp Asp Pro Asp Asp Ser Glu Val Ile Cys Ser Phe
465   470   475   480

Leu Val Ala Leu Met Gln Lys Asn Arg Arg Lys Asp Arg Lys Leu Gly
                485   490   495

Ala Asn Leu Phe Thr Ile Gly Phe Ala Ile Tyr Glu Val Pro Lys Glu
                500   505   510

Met His Gly Asn Lys Gln His Leu Gln Lys Asp Phe Phe Leu Tyr Asn
                515   520   525

Ala Ser Lys Ala Arg Ser Lys Thr Tyr Ile Asn Met Arg Glu Val Ser
    530   535   540

Gln Arg Phe Arg Leu Pro Pro Ser Glu Tyr Val Ile Val Pro Ser Thr
545   550   555   560

Tyr Glu Pro His Gln Glu Gly Glu Phe Ile Leu Arg Val Phe Ser Glu
                565   570   575

Lys Arg Asn Leu Ser Glu Glu Ala Glu Asn Thr Ile Ser Val Asp Arg
                580   585   590

Pro Val Lys Lys Lys Lys Asn Lys Pro Ile Ile Phe Val Ser Asp Arg
                595   600   605

Ala Asn Ser Asn Lys Glu Leu Gly Val Asp Gln Glu Ala Glu Glu Gly
    610   615   620

Lys Asp Lys Thr Gly Pro Asp Lys Gln Gly Glu Ser Pro Gln Pro Arg
625   630   635   640

Pro Gly His Thr Asp Gln Glu Ser Glu Glu Gln Gln Gln Phe Arg Asn
                645   650   655

Ile Phe Arg Gln Ile Ala Gly Asp Asp Met Glu Ile Cys Ala Asp Glu
                660   665   670

Leu Lys Asn Val Leu Asn Thr Val Val Asn Lys His Lys Asp Leu Lys
    675   680   685

Thr Gln Gly Phe Thr Leu Glu Ser Cys Arg Ser Met Ile Ala Leu Met
    690   695   700

Asp Thr Asp Gly Ser Gly Arg Leu Asn Leu Gln Glu Phe His His Leu
705   710   715   720

Trp Lys Lys Ile Lys Ala Trp Gln Lys Ile Phe Lys His Tyr Asp Thr
                725   730   735

Asp His Ser Gly Thr Ile Asn Ser Tyr Glu Met Arg Asn Ala Val Asn
                740   745   750

20

```
Asp Ala Gly Phe His Leu Asn Ser Gln Leu Tyr Asp Ile Ile Thr Met
        755                 760                 765

Arg Tyr Ala Asp Lys His Met Asn Ile Asp Phe Asp Ser Phe Ile Cys
        770                 775                 780

Cys Phe Val Arg Leu Glu Gly Met Phe Arg Ala Phe His Ala Phe Asp
785                 790                 795                 800

Lys Asp Gly Asp Gly Ile Ile Lys Leu Asn Val Leu Glu Trp Leu Gln
                805                 810                 815

Leu Thr Met Tyr Ala
                820


<210> 8
<211> 821
<212> PRT
<213> Homo sapiens

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<400> 8
Met Pro Thr Val Ile Ser Ala Ser Val Ala Pro Arg Thr Ala Ala Glu
  1                 5                 10                  15

Pro Arg Ser Pro Gly Pro Val Pro His Pro Ala Gln Ser Lys Ala Thr
                20                  25                  30
```

```
Glu Ala Gly Gly Gly Asn Pro Ser Gly Ile Tyr Ser Ala Ile Ile Ser
        35                  40                  45

Arg Asn Phe Pro Ile Ile Gly Val Lys Glu Lys Thr Phe Glu Gln Leu
        50                  55                  60

His Lys Lys Cys Leu Glu Lys Lys Val Leu Tyr Val Asp Pro Glu Phe
65              70                  75                      80

Pro Pro Asp Glu Thr Ser Leu Phe Tyr Ser Gln Lys Phe Pro Ile Gln
                85                  90                      95

Phe Val Trp Lys Arg Pro Pro Glu Ile Cys Glu Asn Pro Arg Phe Ile
            100                 105                 110

Ile Asp Gly Ala Asn Arg Thr Asp Ile Cys Gln Gly Glu Leu Gly Asp
            115                 120                 125

Cys Trp Phe Leu Ala Ala Ile Ala Cys Leu Thr Leu Asn Gln His Leu
    130                 135                 140

Leu Phe Arg Val Ile Pro His Asp Gln Ser Phe Ile Glu Asn Tyr Ala
145                 150                 155                 160

Gly Ile Phe His Phe Gln Phe Trp Arg Tyr Gly Glu Trp Val Asp Val
                165                 170                 175

Val Ile Asp Asp Cys Leu Pro Thr Tyr Asn Asn Gln Leu Val Phe Thr
            180                 185                 190

Lys Ser Asn His Arg Asn Glu Phe Trp Ser Ala Leu Leu Glu Lys Ala
        195                 200                 205

Tyr Ala Lys Leu His Gly Ser Tyr Glu Ala Leu Lys Gly Gly Asn Thr
    210                 215                 220

Thr Glu Ala Met Glu Asp Phe Thr Gly Gly Val Ala Glu Phe Phe Glu
225                 230                 235                 240

Ile Arg Asp Ala Pro Ser Asp Met Tyr Lys Ile Met Lys Lys Ala Ile
                245                 250                 255

Glu Arg Gly Ser Leu Met Gly Cys Ser Ile Asp Asp Gly Thr Asn Met
            260                 265                 270

Thr Tyr Gly Thr Ser Pro Ser Gly Leu Asn Met Gly Asp Leu Ile Ala
        275                 280                 285

Arg Met Val Arg Asn Met Glu Asn Ser Arg Leu Arg Asp Ser Ile Leu
    290                 295                 300

Asp Pro Glu Val Ser Asp Asp Arg Pro Thr Arg Thr Ile Val Pro Val
305                 310                 315                 320

Gln Phe Glu Thr Arg Met Ala Cys Gly Leu Val Arg Gly His Ala Tyr
                325                 330                 335
```

22

```
Ser Val Thr Gly Leu Glu Glu Ala Leu Phe Lys Gly Glu Lys Val Lys
        340                 345             350

Leu Val Arg Leu Arg Asn Pro Trp Gly Gln Val Glu Trp Asn Gly Ser
        355                 360             365

Trp Ser Asp Ser Trp Lys Asp Trp Ser Phe Val Asp Lys Asp Glu Lys
370                 375             380

Ala Arg Leu Gln His Gln Val Thr Glu Asp Gly Glu Phe Trp Met Ser
385                 390             395                 400

Tyr Asp Asp Phe Ile Tyr His Phe Thr Lys Leu Glu Ile Cys Asn Leu
                405             410             415

Thr Ala Asp Ala Leu Glu Ser Asp Lys Leu Gln Thr Trp Thr Val Ser
        420             425             430

Val Asn Glu Gly Arg Trp Val Arg Gly Cys Ser Ala Gly Thr Gly Arg
        435             440             445

Asn Phe Pro Asp Thr Phe Trp Thr Asn Pro Gln Tyr Arg Leu Lys Leu
        450             455             460

Leu Glu Glu Asp Asp Asp Pro Asp Asp Ser Glu Val Ile Cys Ser Phe
465             470             475             480

Leu Val Ala Leu Met Gln Arg Asn Arg Arg Lys Asp Arg Lys Leu Gly
        485             490             495

Ala Asn Leu Phe Thr Ile Gly Phe Ala Ile Tyr Glu Val Pro Lys Glu
        500             505             510

Met His Gly Asn Lys Gln His Leu Gln Lys Asp Phe Phe Leu Tyr Asn
        515             520             525

Ala Ser Lys Ala Arg Ser Arg Thr Tyr Ile Asn Met Arg Glu Val Ser
530             535             540

Glu Arg Phe Arg Leu Pro Pro Ser Glu Tyr Val Ile Val Pro Ser Thr
545             550             555             560

Tyr Glu Pro His Gln Glu Gly Glu Phe Met Leu Arg Val Phe Ser Glu
                565             570             575

Lys Arg Lys Leu Ser Glu Glu Val Glu Asn Thr Ile Ser Val Asp Arg
        580             585             590

Pro Val Arg Lys Lys Lys Thr Lys Pro Ile Ile Phe Val Ser Asp Arg
        595             600             605

Ala Asn Ser Asn Lys Glu Leu Gly Val Asp Gln Glu Ser Glu Glu Gly
        610             615             620

Gln Asp Lys Thr Ser Pro Asp Lys Gln Glu Lys Ser Pro Lys Pro Glu
625             630             635             640
```

```
Pro Ser Asn Thr Asp Gln Glu Ser Glu Glu Gln Gln Gln Phe Arg Asn
            645             650             655

Ile Phe Lys Gln Ile Ala Gly Asp Asp Met Glu Ile Cys Ala Asp Glu
            660             665             670

Leu Lys Lys Val Leu Asn Thr Val Val Asn Lys His Lys Asp Leu Lys
        675             680             685

Thr His Gly Phe Thr Leu Glu Ser Cys Arg Ser Met Ile Ala Leu Met
    690             695             700

Asp Thr Asp Gly Ser Gly Lys Leu Asn Leu Gln Glu Phe His His Leu
705             710             715             720

Trp Asn Lys Ile Lys Ala Trp Gln Lys Ile Phe Lys His Tyr Asp Thr
            725             730             735

Asp Gln Ser Gly Thr Ile Asn Ser Tyr Glu Met Arg Asn Ala Val Asn
            740             745             750

Asp Ala Gly Phe His Leu Asn Asn Gln Leu Tyr Asp Ile Ile Thr Met
        755             760             765

Arg Tyr Ala Asp Lys His Met Asn Ile Asp Phe Asp Ser Phe Ile Cys
    770             775             780

Cys Phe Val Arg Leu Glu Gly Met Phe Arg Ala Phe His Ala Phe Asp
785             790             795             800

Lys Asp Gly Asp Gly Ile Ile Lys Leu Asn Val Leu Glu Trp Leu Gln
            805             810             815

Leu Thr Met Tyr Ala
            820


<210> 9
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<212> PRT
<213> Homo sapiens

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<220>
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<222> (310)..(328)
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<400> 9
Met Pro Thr Val Ile Ser Ala Ser Val Ala Pro Arg Thr Ala Ala Glu
 1   5   10   15

Pro Arg Ser Pro Gly Pro Val Pro His Pro Ala Gln Ser Lys Ala Thr
                20   25   30

Glu Ala Gly Gly Gly Asn Pro Ser Gly Ile Tyr Ser Ala Ile Ile Ser
         35   40   45

Arg Asn Phe Pro Ile Ile Gly Val Lys Glu Lys Thr Phe Glu Gln Leu
     50   55   60

His Lys Lys Cys Leu Glu Lys Lys Val Leu Tyr Val Asp Pro Glu Phe
 65   70   75   80

Pro Pro Asp Glu Thr Ser Leu Phe Tyr Ser Gln Lys Phe Pro Ile Gln
                85   90   95

Phe Val Trp Lys Arg Pro Pro Glu Ile Cys Glu Asn Pro Arg Phe Ile
            100   105   110

Ile Asp Gly Ala Asn Arg Thr Asp Ile Cys Gln Gly Glu Leu Gly Asp
         115   120   125

Cys Trp Phe Leu Ala Ala Ile Ala Cys Leu Thr Leu Asn Gln His Leu
     130   135   140

Leu Phe Arg Val Ile Pro His Asp Gln Ser Phe Ile Glu Asn Tyr Ala
145   150   155   160

Gly Ile Phe His Phe Gln Phe Trp Arg Tyr Gly Glu Trp Val Asp Val
                165   170   175

Val Ile Asp Asp Cys Leu Pro Thr Tyr Asn Asn Gln Leu Val Phe Thr
         180   185   190

Lys Ser Asn His Arg Asn Glu Phe Trp Ser Ala Leu Leu Glu Lys Ala
         195   200   205

25

```
Tyr Ala Lys Leu His Gly Ser Tyr Glu Ala Leu Lys Gly Gly Asn Thr
    210             215             220

Thr Glu Ala Met Glu Asp Phe Thr Gly Gly Val Ala Glu Phe Phe Glu
225             230             235             240

Ile Arg Asp Ala Pro Ser Asp Met Tyr Lys Ile Met Lys Lys Ala Ile
                245             250             255

Glu Arg Gly Ser Leu Met Gly Cys Ser Ile Asp Asp Gly Thr Asn Met
                260             265             270

Thr Tyr Gly Thr Ser Pro Ser Gly Leu Asn Met Gly Glu Leu Ile Glu
        275             280             285

Arg Met Val Arg Asn Met Asp Asn Ser Arg Leu Arg Asp Ser Ile Leu
    290             295             300

Asp Pro Glu Val Ser Asp Asp Arg Pro Thr Arg Met Ile Val Pro Val
305             310             315             320

Gln Phe Glu Thr Arg Met Ala Cys Gly Leu Val Arg Gly His Ala Tyr
                325             330             335

Ser Val Thr Gly Leu Glu Glu Ala Leu Tyr Lys Gly Glu Lys Val Lys
        340             345             350

Leu Val Arg Leu Arg Asn Pro Trp Gly Gln Val Glu Trp Asn Gly Ser
        355             360             365

Trp Ser Asp Ser Trp Lys Asp Trp Ser Tyr Val Asp Lys Asp Glu Lys
    370             375             380

Ala Arg Leu Gln His Gln Val Thr Glu Asp Gly Glu Phe Trp Met Ser
385             390             395             400

Tyr Glu Asp Phe Ile Tyr His Phe Thr Lys Leu Glu Ile Cys Asn Leu
                405             410             415

Thr Ala Asp Ala Leu Gln Ser Asp Lys Leu Gln Thr Trp Thr Val Ser
            420             425             430

Val Asn Glu Gly Arg Trp Val Arg Gly Cys Ser Ala Gly Gly Cys Arg
        435             440             445

Asn Phe Pro Asp Thr Phe Trp Thr Asn Pro Gln Tyr Arg Leu Lys Leu
    450             455             460

Leu Glu Glu Asp Asp Asp Pro Asp Asp Ser Glu Val Ile Cys Ser Phe
465             470             475             480

Leu Val Ala Leu Met Gln Lys Asn Arg Arg Lys Asp Arg Lys Leu Gly
            485             490             495

Ala Ser Leu Phe Thr Ile Gly Phe Ala Ile Tyr Glu Val Pro Lys Glu
        500             505             510
```

26

```
Met His Gly Asn Lys Gln His Leu Gln Lys Asp Phe Phe Leu Tyr Asn
        515                 520             525

Ala Ser Lys Ala Arg Ser Lys Thr Tyr Ile Asn Met Arg Glu Val Ser
    530                 535             540

Gln Arg Phe Arg Leu Pro Pro Ser Glu Tyr Val Ile Val Pro Ser Thr
545             550             555             560

Tyr Glu Pro His Gln Glu Gly Glu Phe Ile Leu Arg Val Phe Ser Glu
            565             570             575

Lys Arg Asn Leu Ser Glu Glu Val Glu Asn Thr Ile Ser Val Asp Arg
        580             585             590

Pro Val Lys Lys Lys Lys Thr Lys Pro Ile Ile Phe Val Ser Asp Arg
    595             600             605

Ala Asn Ser Asn Lys Glu Leu Gly Val Asp Gln Glu Ser Glu Glu Gly
    610             615             620

Lys Gly Lys Thr Ser Pro Asp Lys Gln Lys Gln Ser Pro Gln Pro Gln
625             630             635             640

Pro Gly Ser Ser Asp Gln Glu Ser Glu Glu Gln Gln Gln Phe Arg Asn
            645             650             655

Ile Phe Lys Gln Ile Ala Gly Asp Asp Met Glu Ile Cys Ala Asp Glu
        660             665             670

Leu Lys Lys Val Leu Asn Thr Val Val Asn Lys His Lys Asp Leu Lys
        675             680             685

Thr His Gly Phe Thr Leu Glu Ser Cys Arg Ser Met Ile Ala Leu Met
    690             695             700

Asp Thr Asp Gly Ser Gly Lys Leu Asn Leu Gln Glu Phe His His Leu
705             710             715             720

Trp Asn Lys Ile Lys Ala Trp Gln Lys Ile Phe Lys His Tyr Asp Thr
            725             730             735

Asp Gln Ser Gly Thr Ile Asn Ser Tyr Glu Met Arg Asn Ala Val Asn
        740             745             750

Asp Ala Gly Phe His Leu Asn Asn Gln Leu Tyr Asp Ile Ile Thr Met
        755             760             765

Arg Tyr Ala Asp Lys His Met Asn Ile Asp Phe Asp Ser Phe Ile Cys
    770             775             780

Cys Phe Val Arg Leu Glu Gly Met Phe Arg Ala Phe His Ala Phe Asp
785             790             795             800

Lys Asp Gly Asp Gly Ile Ile Lys Leu Asn Val Leu Glu Trp Leu Gln
            805             810             815
```

27

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Leu Thr Met Tyr Ala
          820


<210> 10
<211> 20
<212> DNA
<213> Homo sapiens

<220>
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<400> 10
atggagccaa cagaactgac                                                    20

<210> 11
<211> 21
<212> DNA
<213> Homo sapiens

<220>
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<223> /label= Table 1

<400> 11
gtatgactcg gaaaagaagg t                                                  21

<210> 12
<211> 20
<212> DNA
<213> Homo sapiens

<220>
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<222> (1)..(20)
<223> /label= Table 1

<400> 12
taagcaaaag cagtccccac                                                    20

<210> 13
<211> 21
<212> DNA
<213> Homo sapiens

<220>
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<222> (1)..(21)
<223> /label= Table 1

<400> 13
ttgctgttcc tcactttcct g                                                  21

<210> 14
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<211> 20
<212> DNA
<213> Homo sapiens

<220>
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<400> 14
gtttcatctg ctgcttcgtt                                          20


<210> 15
<211> 20
<212> DNA
<213> Homo sapiens

<220>
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<223> /label= Table 1

<400> 15
ctggttcagg catacatggt                                         20


<210> 16
<211> 22
<212> DNA
<213> Homo sapiens

<220>
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<222> (1)..(22)
<223> /label= Table 1

<400> 16
ttctttatgt ggaccctgag tt                                       22


<210> 17
<211> 19
<212> DNA
<213> Homo sapiens

<220>
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<222> (1)..(19)
<223> /label= Table 1

<400> 17
acgaactgga tggggaact                                           19


<210> 18
<211> 20
<212> DNA
<213> Homo sapiens

<220>
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<221> misc_feature
<222> (1)..(20)
<223> /label= Table 3

<400> 18
ttcagtacct cccgttcacc                                                    20


<210> 19
<211> 20
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(20)
<223> /label= Table 3

<400> 19
gatgcttgag ccaggaaaac                                                    20


<210> 20
<211> 22
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(22)
<223> /label= Table 3

<400> 20
ctttccttga aggtagctgt at                                                 22


<210> 21
<211> 20
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(20)
<223> /label= Table 3

<400> 21
gaggtgctga gtgagaggac                                                    20


<210> 22
<211> 22
<212> DNA
<213> Homo sapiens

<220>
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<222> (1)..(22)
<223> /label= Table 3
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<400> 22
actccgtctc aaaaaaatac ct                                           22

<210> 23
<211> 20
<212> DNA
<213> Homo sapiens

<220>
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<222> (1)..(20)
<223> /label= Table 3

<400> 23
attgtccctt tacctcctgg                                              20

<210> 24
<211> 20
<212> DNA
<213> Homo sapiens

<220>
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<222> (1)..(20)
<223> /label= Table 3

<400> 24
tggaagtagg agagtgggca                                              20

<210> 25
<211> 20
<212> DNA
<213> Homo sapiens

<220>
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<222> (1)..(20)
<223> /label= Table 3

<400> 25
gggtagatgg gtgggaagtt                                              20

<210> 26
<211> 20
<212> DNA
<213> Homo sapiens

<220>
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<222> (1)..(20)
<223> /label= Table 3

<400> 26
gaggaatgtg gaggaaggac                                              20

<210> 27
<211> 20
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<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(20)
<223> /label= Table 3

<400> 27
ttcctgtgag tgaggtctcg                                         20

<210> 28
<211> 20
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(20)
<223> /label= Table 3

<400> 28
ggaactctgt gaccccaaat                                         20

<210> 29
<211> 20
<212> DNA
<213> Homo sapiens

<220>
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<222> (1)..(20)
<223> /label= Table 3

<400> 29
tcctcaaaca aaacattcgc                                         20

<210> 30
<211> 20
<212> DNA
<213> Homo sapiens

<220>
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<222> (1)..(20)
<223> /label= Table 3

<400> 30
gttccctaca ttctccatcg                                         20

<210> 31
<211> 21
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
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<222> (1)..(21)
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<400> 31
gttatttcaa cccagaccct t                                              21

<210> 32
<211> 21
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(21)
<223> /label= Table 3

<400> 32
aatgggttct ctggttactg c                                              21

<210> 33
<211> 21
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(21)
<223> /label= Table 3

<400> 33
agcacgaaaa gcaaagataa a                                              21

<210> 34
<211> 20
<212> DNA
<213> Homo sapiens

<220>
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<222> (1)..(20)
<223> /label= Table 3

<400> 34
gtaagagatt tgcccccag                                                 20

<210> 35
<211> 20
<212> DNA
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<220>
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<222> (1)..(20)
<223> /label= Table 3

<400> 35
tctgcggatc attggttttg                                                20
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<210> 36
<211> 20
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<213> Homo sapiens

<220>
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<222> (1)..(20)
<223> /label= Table 3

<400> 36
ccttcccttc ttcctgcttc                                              20


<210> 37
<211> 20
<212> DNA
<213> Homo sapiens

<220>
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<222> (1)..(20)
<223> /label= Table 3

<400> 37
ctctcttccc cacccttacc                                              20


<210> 38
<211> 20
<212> DNA
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<220>
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<222> (1)..(20)
<223> /label= Table 3

<400> 38
cctcctcacc tgctcccata                                              20


<210> 39
<211> 20
<212> DNA
<213> Homo sapiens

<220>
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<222> (1)..(20)
<223> /label= Table 3

<400> 39
tttttcggct tagaccctcc                                              20


<210> 40
<211> 22
<212> DNA
<213> Homo sapiens
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<220>
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<222> (1)..(22)
<223> /label= Table 3

<400> 40
tgtggggaat agaaataaat gg                                              22


<210> 41
<211> 19
<212> DNA
<213> Homo sapiens

<220>
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<222> (1)..(19)
<223> /label= Table 3

<400> 41
ccaggagctc tgtgggtca                                                  19


<210> 42
<211> 21
<212> DNA
<213> Homo sapiens

<220>
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<222> (1)..(21)
<223> /label= Table 3

<400> 42
ggctcctcat cctcattcac a                                               21


<210> 43
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<212> DNA
<213> Homo sapiens

<220>
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<222> (1)..(20)
<223> /label= Table 3

<400> 43
gtggaggagg gtgagtgtgc                                                 20


<210> 44
<211> 20
<212> DNA
<213> Homo sapiens

<220>
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<222> (1)..(20)
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<223> /label= Table 3

<400> 44
tgtggcagga caggacgttc   20

<210> 45
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<213> Homo sapiens

<220>
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<222> (1)..(20)
<223> /label= Table 3

<400> 45
ttcaacctct ggagtgggcc   20

<210> 46
<211> 20
<212> DNA
<213> Homo sapiens

<220>
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<222> (1)..(20)
<223> /label= Table 3

<400> 46
caccagagca aaccgtccac   20

<210> 47
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<212> DNA
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<220>
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<222> (1)..(20)
<223> /label= Table 3

<400> 47
acagcccaga ctcccattcc   20

<210> 48
<211> 20
<212> DNA
<213> Homo sapiens

<220>
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<222> (1)..(20)
<223> /label= Table 3

<400> 48
ttctcttctc ccttcaccct   20

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<211> 22
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<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(22)
<223> /label= Table 3

<400> 49
acacacttca tgctctctac cc                                      22


<210> 50
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<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(20)
<223> /label= Table 3

<400> 50
ccgcctattc ctttcctctt                                         20


<210> 51
<211> 20
<212> DNA
<213> Homo sapiens

<220>
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<223> /label= Table 3

<400> 51
gacaaactcc tgggaagcct                                         20


<210> 52
<211> 20
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(20)
<223> /label= Table 3

<400> 52
acctctgacc cctgtgaacc                                         20


<210> 53
<211> 20
<212> DNA
<213> Homo sapiens
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<220>
<221> misc_feature
<222> (1)..(20)
<223> /label= Table 3

<400> 53
tgtggatttg tgtgctacgc                                              20

<210> 54
<211> 21
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(21)
<223> /label= Table 3

<400> 54
cataaatagc accgacaggg a                                            21

<210> 55
<211> 20
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(20)
<223> /label= Table 3

<400> 55
gggatggaga agagtgagga                                              20

<210> 56
<211> 20
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(20)
<223> /label= Table 3

<400> 56
tcctcactct tctccatccc                                              20

<210> 57
<211> 19
<212> DNA
<213> Homo sapiens

<220>
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<222> (1)..(19)
<223> /label= Table 3
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accctgtatg ttgccttgg                                                    19


<210> 58
<211> 20
<212> DNA
<213> Homo sapiens

<220>
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<222> (1)..(20)
<223> /label= Table 3

<400> 58
ggggattttg ctgtgtgctg                                                   20


<210> 59
<211> 20
<212> DNA
<213> Homo sapiens

<220>
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<222> (1)..(20)
<223> /label= Table 3

<400> 59
attcctgctc ccaccgtctc                                                   20


<210> 60
<211> 20
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(20)
<223> /label= Table 3

<400> 60
cacagagtgt ccgagaggca                                                   20


<210> 61
<211> 22
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(22)
<223> /label= Table 3

<400> 61
ggagattatc aggtgagatg cc                                                22


<210> 62
<211> 21
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<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(21)
<223> /label= Table 3

<400> 62
cagagtgtcc gagaggcagg g                                        21

<210> 63
<211> 20
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(20)
<223> /label= Table 3

<400> 63
cgttgaccccc tccaccttga                                          20

<210> 64
<211> 20
<212> DNA
<213> Homo sapiens

<220>
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<222> (1)..(20)
<223> /label= Table 3

<400> 64
gggaaaacat gcaccttctt                                           20

<210> 65
<211> 20
<212> DNA
<213> Homo sapiens

<220>
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<222> (1)..(20)
<223> /label= Table 3

<400> 65
taggggggtaa aatggaggag                                          20

<210> 66
<211> 20
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
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<222> (1)..(20)
<223> /label= Table 3

<400> 66
actaactcag tggaataggg                                              20

<210> 67
<211> 19
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(19)
<223> /label= Table 3

<400> 67
ggagctagga tagctcaat                                               19

<210> 68
<211> 1302
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(1302)
<223> /note= Flanking 5' genomic region of the sequence of the human nCL1 cDNA
described in Figure 2a

<220>
<221> misc_feature
<222> (-477)..(-472)
<223> /note= Putative Sp1 in Figure 2a

<220>
<221> misc_feature
<222> (-364)..(-343)
<223> /note= MEF2 binding sites in Figure 2a

<220>
<221> misc_feature
<222> (-685)..(-672)
<223> /note= CArG box in Figure 2a

<400> 68
atatcagtta gcctggtttc actatacagt acatcatttt gcttaaagtc acagcttacg 60
agaacctatc gatgatgtta agtgaggatt ttctctgctc aggtgcactt tttttttttt 120
ttaagacgga gtctctttct gtcacctggg ctggagtgca gtggcgtgat ctgggttcac 180
tacaacctct ccctcctggg ttcaagcaat tcttctgtct cagcctccca agtagctggg 240
attacaggca cccccgcca cacccggctt attttgtat ttttagtaga gacagggttt 300
cactattgtt gtccatgctg gtctcgaact cgtgacctca tgtgatccac ccgcctcggc 360
ctcccaaagt gcagagatta gagacgtgat ccacatggcc cagcaggacc acttttttagc 420
agattcagtc ccagtgttca ttttgtggat ggggagagac aagaggtggc aaggtcaagt 480
gtgcaggtag agacagggat tttctcaaat gaggactctg ctgagtagca ttttccatgc 540
agacatttcc aatgagcgct gacccaagaa cattctaaaa aagataccaa atctaacatt 600
gaataatgtt ctgatatcct aaaattttag gactaaaaat catgttctct aaaattcaca 660
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41

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gaatattttt gtagaattca gtacctcccg ttcaccctaa ctagcttttt tgcaatattg 720
ttttccattc atttgatggc cagtagttgg gtggtctgta taactgccta ctcaataaca 780
tgtcagcagt tctcagcttc tttccagtgt tcaccttact cagatactcc cttttcattt 840
tctggcaaca ccagcacttc atggcaacag aaatgtccct agccaggttc tctctctacc 900
atgcagtctc tcttgctctc atactcacag tgtttcttca catctatttt tagttttcct 960
ggctcaagca tcttcaggcc actgaaacac aaccctcact ctctttctct ctccctctgg 1020
catgcatgct gctggtagga gaccccaag tcaacattgc ttcagaaatc ctttagcact 1080
catttctcag gagaacttat ggcttcagaa tcacagctcg gtttttaaga tggacataac 1140
ctgtccgacc ttctgatggg cttttcaactt tgaactggat gtggacactt ttctctcaga 1200
tgacagaatt actccaactt cccctttgca gttgcttcct ttccttgaag gtagctgtat 1260
cttattttct ttaaaaagct ttttcttcca aagccacttg cc                     1302
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<210> 69
<211> 1381
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(1381)
<223> /note= Flanking 3' genomic region of the sequence of the human nCL1 cDNA
described in Figure 2c

<400> 69
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                                                ac caggctggcc   12
tcatccaaag ccatgcagga tcactcagga tttcagtttc accctctatt tccaaagcca   72
tttacctcaa aggacccagc agctacaccc ctacaggctt ccaggcacct catcagtcat  132
gttcctcctc cattttaccc cctacccatc cttgatcggt catgcctagc ctgacccttt  192
agtaaagcaa tgaggtagga agaacaaacc cttgtccctt tgccatgtgg aggaaagtgc  252
ctgcctctgg tccgagccgc ctcggttctg aagcgagtgc tcctgcttac cttgctctag  312
gctgtctgca gaagcacctg ccggtggcac tcagcacctc cttgtgctag agccctccat  372
caccttcacg ctgtcccacc atgggccagg aaccaaacca gcactgggtt ctactgctgt  432
ggggtaaact aactcagtgg aatagggctg gttactttgg gctgtccaac tcataagttt  492
ggctgcattt tgaaaaaagc tgatctaaat aaaggcatgt gtatggctgg tccccttgtg  552
ttttgttgtc tcacatttag atatcagcca tgcatgactg aatggcttcc aatcatatac  612
tcacctatca cctacaagag aacaatgaaa aacacacaca aaaacaaaat cttgaatttt  672
gtaatcatgc ctattgctat ttcttgagca taagaatggc tcagatactt tccaagacat  732
aaaaggaagg cagaggaata gttgttgctg taaaagacat caagaataaa tgggtcatgt  792
acaacgggag gggccggtta cctgaataat ggagtggaga ttgagctatc ctagctcctc  852
tgctcactaa ctgacctgtc gcatgaccgt ggacaaaacc ctgaacgcag ctgtttgttt  912
gctaaacttc tctggaccat ggcctgcggc atatctatag gcatcctgtg ttttccaccc  972
agtttccttc ttcctcgcta agccaacgtg gaaagggctg gccgtgaata tgcagacaag 1032
gtaacgaaag taaaccgtca attagtaaaa gtacttcatt ttcctcttgt atttgcttca 1092
tatcttgctt cacaaagtta cgaagttcac agctttatac caaaatgtaa gaaggctatt 1152
tgcttataaa catttttgca gtcaggtgtc atctgatttc attcttctaa tccatattca 1212
atattanaaa aatcagaaac caagggtgct ggagcagctc tagggcatat atttctctta 1272
aataggagaa agattttcaa cagcttttcc tccttgaccc cctcctttcc caatttattt 1332
gggtcactac cttgaattta gagtgaatct gggaaatgta gtcaccagg             1381
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<210> 70
<211> 2466
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(2466)

42

<223> /note= Sequence of the human nCL1 cDNA described in Figure 2b

<400> 70

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                                                    atgccgac cgtcattagc  18
gcatctgtgg ctccaaggac agcggctgag ccccggtccc cagggccagt tcctcacccg  78
gcccagagca aggccactga ggctggggggt ggaaacccaa gtggcatcta ttcagccatc  138
atcagccgca attttcctat tatcggagtg aaagagaaga cattcgagca acttcacaag  198
aaatgtctag aaaagaaagt tctttatgtg gaccctgagt tcccaccgga tgagacctct  258
ctcttttata gccagaagtt ccccatccag ttcgtctgga agagacctcc ggaaatttgc  318
gagaatcccc gatttatcat tgatggagcc aacagaactg acatctgtca aggagagcta  378
ggggactgct ggtttctcgc agccattgcc tgcctgaccc tgaaccagca ccttctttc   438
cgagtcatac cccatgatca aagtttcatc gaaaactacg cagggatctt ccacttccag  498
ttctggcgct atggagagtg ggtggacgtg gttatagatg actgcctgcc aacgtacaac  558
aatcaactgg ttttcaccaa gtccaaccac cgcaatgagt tctggagtgc tctgctggag  618
aaggcttatg ctaagctcca tggttcctac gaagctctga aaggtgggaa caccacagag  678
gccatggagg acttcacagg aggggtggca gagttttttg agatcaggga tgctcctagt  738
gacatgtaca agatcatgaa gaaagccatc gagagaggct ccctcatggg ctgctccatt  798
gatgatggca cgaacatgac ctatggaacc tctccttctg gtctgaacat gggggagttg  858
attgcacgga tggtaaggaa tatggataac tcactgctcc aggactcaga cctcgacccc  918
agaggctcag atgaaagacc gacccggaca atcattccgg ttcagtatga dacaagaatg  978
gcctgcgggc tggtcagagg tcacgcctac tctgtcacgg ggctggatga ggtcccgttc  1038
aaaggtgaga aagtgaagct ggtgcggctg cggaatccgt gggggccaggt ggagtggaac  1098
ggttcttgga gtgatagatg gaaggactgg agctttgtgg acaaagatga gaaggcccgt  1158
ctgcagcacc aggtcactga ggatggagag ttctggatgt cctatgagga tttcatctac  1218
catttcacaa agttggagat ctgcaacctc acggccgatg ctctgcagtc tgacaagctt  1278
cagacctgga cagtgtctgt gaacgagggc cgctgggtac ggggttgctc tgccggaggc  1338
tgccgcaact tcccagatac tttctggacc aaccctcagt accgtctgaa gctcctggag  1398
gaggacgatg accctgatga ctcggaggtg atttgcagct tcctggtggc cctgatgcag  1458
aagaaccggc ggaaggaccg gaagctaggg gccagtctct tcaccattgg cttcgccatc  1518
tacgaggttc ccaaagagat gcacgggaac aagcagcacc tgcagaagga cttcttcctg  1578
tacaacgcct ccaaggccag gagcaaaacc tacatcaaca tgcgggaggt gtcccagcgc  1638
ttccgcctgc ctcccagcga gtacgtcatc gtgccctcca cctacgagcc ccaccaggag  1698
ggggaattca tcctccgggt cttctctgaa aagaggaacc tctctgagga agttgaaaat  1758
accatctccg tggatcggcc agtgaaaaag aaaaaaacca agcccatcat cttcgtttcg  1818
gacagagcaa acagcaacaa ggagctgggt gtggaccagg agtcagagga gggcaaaggc  1878
aaaacaagcc ctgataagca aaagcagtcc ccacagccac agcctggcag ctctgatcag  1938
gaaagtgagg aacagcaaca attccggaac attttcaagc agatagcagg agatgacatg  1998
gagatctgtg cagatgagct caagaaggtc cttaacacag tcgtgaacaa acacaaggac  2058
ctgaagacac acgggttcac actggagtcc tgccgtagca tgattgcgct catggataca  2118
gatggctctg gaaagctcaa cctgcaggag ttccaccacc tctggaacaa gattaaggcc  2178
tggcagaaaa ttttcaaaca ctatgacaca gaccagtccg gcaccatcaa cagctacgag  2238
atgcgaaatg cagtcaacga cgcaggattc cacctcaaca accagctcta tgacatcatt  2298
accatgcggt acgcagacaa acacatgaac atcgactttg acagtttcat ctgctgcttc  2358
gttaggctgg agggcatgtt cagagctttt catgcatttg acaaggatgg agatggtatc  2418
atcaagctca acgttctgga gtggctgcag ctcaccatgt atgcctga             2466
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<210> 71
<211> 11
<212> DNA
<213> Homo sapiens

<220>
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<223> /label= Table 2

<400> 71

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ctccggtgag t                                              11

<210> 72
<211> 11
<212> DNA
<213> Homo sapiens

<220>
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<222> (1)..(11)
<223> /label= Table 2

<400> 72
gctaggtagg a                                              11

<210> 73
<211> 11
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(11)
<223> /label= Table 2

<400> 73
tccaggtgag g                                              11

<210> 74
<211> 11
<212> DNA
<213> Homo sapiens

<220>
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<222> (1)..(11)
<223> /label= Table 2

<400> 74
gctaagtaag c                                              11

<210> 75
<211> 11
<212> DNA
<213> Homo sapiens

<220>
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<223> /label= Table 2

<400> 75
ttgatgtaag t                                              11

<210> 76
<211> 11
<212> DNA
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<213> Homo sapiens

<220>
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<222> (1)..(11)
<223> /label= Table 2

<400> 76
cccgggtgtg t                                                    11

<210> 77
<211> 11
<212> DNA
<213> Homo sapiens

<220>
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<222> (1)..(11)
<223> /label= Table 2

<400> 77
atgaggtaag c                                                    11

<210> 78
<211> 11
<212> DNA
<213> Homo sapiens

<220>
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<222> (1)..(11)
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<400> 78
gataggtagg t                                                    11

<210> 79
<211> 11
<212> DNA
<213> Homo sapiens

<220>
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<223> /label= Table 2

<400> 79
ttctggtgag t                                                    11

<210> 80
<211> 11
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(11)
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<223> /label= Table 2

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cccaggtggg a                                                    11

<210> 81
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<212> DNA
<213> Homo sapiens

<220>
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<222> (1)..(11)
<223> /label= Table 2

<400> 81
acgaggtgtg t                                                    11

<210> 82
<211> 11
<212> DNA
<213> Homo sapiens

<220>
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<222> (1)..(11)
<223> /label= Table 2

<400> 82
aagaggtata g                                                    11

<210> 83
<211> 11
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(11)
<223> /label= Table 2

<400> 83
tctgagtgag t                                                    11

<210> 84
<211> 11
<212> DNA
<213> Homo sapiens

<220>
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<222> (1)..(11)
<223> /label= Table 2

<400> 84
cagtggtgag t                                                    11
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<210> 85
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<220>
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<223> /label= Table 2

<400> 85
ccaaggtagg t                                                    11


<210> 86
<211> 11
<212> DNA
<213> Homo sapiens

<220>
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<222> (1)..(11)
<223> /label= Table 2

<400> 86
cacaggtgtc t                                                    11


<210> 87
<211> 11
<212> DNA
<213> Homo sapiens

<220>
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<222> (1)..(11)
<223> /label= Table 2

<400> 87
gagatgtgag t                                                    11


<210> 88
<211> 11
<212> DNA
<213> Homo sapiens

<220>
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<400> 88
caaacgtgag t                                                    11


<210> 89
<211> 11
<212> DNA
<213> Homo sapiens
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<220>
<221> misc_feature
<222> (1)..(11)
<223> /label= Table 2

<400> 89
tggatgtatc c                                                              11


<210> 90
<211> 11
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(11)
<223> /label= Table 2

<400> 90
ggcaggtggg a                                                              11


<210> 91
<211> 11
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(11)
<223> /label= Table 2

<400> 91
cgcaggtgct g                                                              11


<210> 92
<211> 19
<212> DNA
<213> Homo sapiens

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